

Card 1/2

L 54753-65

ACCESSION NR: AP5015638

6
nization coefficients. It is shown that the Saha-Langmuir equation
is valid at sufficiently high temperatures or sufficiently

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7

formulas.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokris-tallov, Khar'kov (All-Union Scientific Research Institute for Single Crystals)

SUBMITTED: 08Aug64

ENCL: 00

SUB CODE: EM, MP

NR REF Sov: 002

OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

ACCESSION NR: AP5015639

AUTHOR: Chaykovskiy, E.F.; Pyatigorskiy, G.M.; Ptitsyn, G.V.

TITLE: Temperature hysteresis of positive surface ionization and the work function of a uniform emitter

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.6, 1965, 1132-1138

TOPIC TAGS: surface ionization, alkali metal, hysteresis, work function, platinum, molybdenum, nickel, rubidium, potassium, cesium

ABSTRACT: The authors calculate the critical threshold temperature T_c above which hysteresis of the threshold temperature for positive surface ionization on a uniform emitter does not occur. By using the ionic heat of adsorption and the emit-

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CIA-RDP86-00513R001343720013-7

ion, respectively. Corrections were made

Card 1 / 4

L 54752-65

ACCESSION NR: AP5015639

the nonlocalized adsorption model of E.F.Chaykovskiy and G.M.Pyatikorakiv (DAN SSSR 153,401,1963) and the localized adsorption model of

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Card 2/4

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ACCESSION NR: AP5015639

2
pressure. The threshold temperature at that vapor pressure above
vataresis no longer occurs was deter-
mined to

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art.has: 19 formulas and 2000

Card 3/4

L 54752-65

ACCESSION NR: AP5015639

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokris-

monokristallov i poluprovodnikov
All Union Scientific Research Institute for Single
Crystal and Semiconductor Materials

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

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CIA-RDP86-00513R001343720013-7

~~tallov, Khar'kov (All-Union program
Crystals~~

SUBMITTED: 22Aug64

NR REF Sov: 011

ENCL: 00

OTHER: 005

SUB CODE: EM, EC

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Card 4/4

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

ACCESSION NR: AP4042933

S/0057/64/034/008/1444/1450

AUTHOR: Pyatigorskiy, G.M.

TITLE: Concerning surface ionization on metals in an electric field

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1444-1450

TOPIC TAGS: ionization, surface ionization, gas ionization, hysteresis

ABSTRACT: A statistical thermodynamic treatment is given of surface ionization in the presence of an electric field. The treatment is based on the equation expressing the condition for equilibrium between the adsorbed layer and the surrounding gas, the molecules of which (the adatoms) execute harmonic vibrations normal to the surface. The binding of the adatoms to the surface is regarded as essentially ionic (for alkali and alkaline earth atoms), and the vibration frequency is accordingly estimated from the vibration frequency of the corresponding ionic molecule. The expression derived for the surface ionization coefficient differs somewhat from that obtained by E.Ya.Zandberg (ZhTF 33, 743, 1963) because Zandberg did not fully take into account the effect of the electric field on the ionization energy. Particular attention is given to threshold effects and hysteresis phenomena. In this treatment

1/3

ACCESSION NR: AP4042933

it is assumed that the surface density of the adsorbed layer remains sufficiently low that its effect on the adsorption energy can be represented by a linear term, and that the electric field is sufficiently weak (less than about 10^7 V/cm) that only its direct force on the ion need be taken into account. For a given value of the electric field there is a critical flux of incident particles above which hysteresis does not occur. The threshold temperature for the critical flux, as well as the critical flux itself, increases with increasing field strength. The critical flux for zero field is finite, and at lower fluxes hysteresis occurs even at zero field. The difference between the two threshold temperatures in the case of hysteresis increases with increasing field and is approximately proportional to the square root of the field strength. The approximate linear dependence of the lower threshold temperature on the square root of the field strength is derived, and expressions are given for the coefficients. It should be possible to observe hysteresis effects also at constant temperature by varying the electric field strength. "The author thanks E.F. Chaykovskiy for discussing the results of the work." Orig.art.has: 40 formulas and 1 figure.

2/3

ACCESSION NR: AP4042933

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, Khar'-kov (All-Union Scientific Research Institute of Single Crystals)

SUBMITTED: 10Nov63

SUB CODE: NP,GP

NR REF Sov: 006

ENCL: 00

OTHER: 001

3/3

L 13625-63 EWT(1)/EWG(k)/BDS/EEC(b)-2/ES(w)-2 AFFTC/ASD/ESD-3/AFWL/
SSD Pz-4/P1-4/Po-4/Pab-4 AT/LJP(C) 8/0056/63/044/006/2029/2038
ACCESSION NR: AP3003136

AUTHOR: Pargamanik, L. E.; Pyatigorskiy, G. M.

TITLE: Shifts and broadening of energy levels of single-electron atoms and ions
in a high-temperature plasma

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no.6, 1963, 2029-2038

TOPIC TAGS: energy level shifts, level broadening, single electron atoms,
single electron ions, high-temperature plasma, spectral representation, mass
and vertex operators

ABSTRACT: The spectral representation and a Bethe-Salpeter equation for the
electron-ion Green's function are used to calculate the shifts and widths of the
energy levels of single-electron atoms and ions in an equilibrium high-tempera-
ture plasma. This goes beyond the work reported in a recent paper by L. P.
Kudrin and Yu. A. Tarasov (ZhETF v. 43, 1504, 1962), where this procedure was
used for low-temperature plasma. The calculated quantities are expressed in
terms of the mass and vertex operators obtained by the diagram techniques. The
level shifts are proportional to the square root of the temperature and density
for ions and to the first powers of these quantities for hydrogen atoms, the

Card 1/2

L 13625-63

ACCESSION NR: AP3003136

width always being proportional to the density. The one- and two-particle excitations are described with the aid of temperature-dependent Green's functions expanded in Fourier series with respect to the reciprocal of the temperature. The limits of applicability of the obtained results are indicated. Orig. art. has: 3 figures and 38 formulas.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Kharkov State University)

SUBMITTED: 12Jan63

DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: 00

NO REF Sov: 005

OTHER: 006

Card 2/2

EB

CHAYKOVSKIY, E.F.; PYATIGORSKIY, G.M.

Determining the heat of vaporization of positive ions during
the surface ionization of atoms of alkali metals. Zhur. tekh.
fiz. 34 no.6;1092-1100 Je '64. (MIRA 17:9)

PIATIGORSKIY, G.M.

Surface ionization of metals in an electric field. Zhur. tekh. fiz.
34 no.8:1444-1450 Ag '64. (MIREA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov,
Khar'kov.

KOZUBOVSKIY, A.S., PYATIGORSKIY, I.I.

The new RNA-65 automatic voltage regulator. Biul.tekh.-ekon.
inform.Gos.nauch.-issl.inost.nauch.i tekhn.inform. 1B
no.11:42-65 N '65. (MINA 18:12)

PIATIGORSKY, I. V.

PIATIGORSKII, I. V.

Effect of erythema doses of ultraviolet radiation on thermo-regulating functions in infants. Vopr. pediat. 18:3, 1950.
p. 47-50

1. Of the Department of Children's Physiotherapy, Khar'kov Scientific-Research Institute for the Care of Mothers and Children (Scientific Director—Honored Worker in Science Prof. S. Ya. Shafershteyn; Director of Institute—Candidate Medical Sciences A. G. Logunova), Khar'kov.

CLML 19, 5, Nov., 1950

PYATIGORSKIY, I.V.

Effect of erythema dose of ultraviolet rays on certain immuno-biologic reactions in infants. Pediatrja, Moskva No.1:72-73 Jan-Feb 52.
(CLML 21:4)

1. Of Khar'kov Scientific-Research Institute for the Care of Mother and Child.

PYATIGORSKIY, I. V.

USSR/Medicine - Effects of Radiation Jan/Feb 52

Jan/Feb 52

"Mechanism of the Action of Ultraviolet Radiation in Erythemic Doses on the Organism of Small Children," I. V. Pyatigorskiy, Khar'kov Inst of Maternity and Child Care

"Vop Pedi Okhran Mater i Det" Vol XX, No 1, 1952,
pp 25-27

Fractional erythemotherapeutic UV (ultraviolet) treatment of children ranging from 1 to 18 mos of age showed that the nervous system plays the primary role in the mechanism of the effect of UV radiation. Through its effect on the nervous system, it affects nerve trophism. UV erythemic 206793

USSR/Medicine - Effects of Radiation Jan/Feb 52
(Contd)

therapy is not only a reflexory, but a reflectory-trophic therapy regulating the whole organism. Hormonal and biochemical factors are a 2d important link in the mechanism of UV erythema.

206793

PYATIGORSKIY, I.V.

Rythema-dose ultraviolet therapy of rickets in infants. Vopr. pediat.
20 no.6:22-28 Nov-Dec 1952. (GLML 23:4)

1. Of Khar'kov Scientific-Research Institute for the Care of Mother and
Child (Director -- Candidate Medical Sciences -- A. G. Logunova).

PYATIGORSKIY, I. V.

USSR/Medicine - Effects of Radiation Mar/Apr 53

"Changes in the Suprarenal Cortex Under the Effect of Ultraviolet Irradiation in Erythema - Producing Doses," I.A. Dudnik, Jr Sci Assoc; Doc I.V. Pyatigorskiy; E.Z. Yusfina, Cam Ned Sci, Kharkov Sci Res Inst for the Protection of Mother and Child

Vop Fed i Okhrany Mater i Detst, Vol 21, No 2,
pp 48-54

Describes exptl irradiation of rats with ultraviolet rays of varied dosage. Findings showed an increase in weight of the suprarenal glands of

273165

irradiated animals, regardless of their age. Parallel with the weight increase, a decrease in size and weight of the thymus glands was observed in these animals. The authors assume that results of this research may be of benefit in the treatment of children's diseases.

PYATIGORSKIV, I.V.

PYATIGORSKIV, I.V.: "Fractional-erythemic ultra-violet irradiation of young children". Khar'kov, 1955. Khar'kov State Medical Inst. (Dissertations for the Degree of Doctor of Medical Sciences).

SO: Knizhnaya letopis' No 44, 29 October 1955. Moscow.

FEDULOV, S.A.; LADYZHINSKIY, P.B.; PYATIGORSKAYA, L.I.; VENEVTSEV, Yu.N.

Complete phase diagram of the system $PbTiO_3 - BiFeO_3$. Fiz. tver.
tela 6 no.2:475-478 F '64. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh
reaktivov i osebo chistiykh khimicheskikh veshchestv, Moskva.

PYATIGORSKAYA, M. S., Cand Med Sci -- (diss) "Trophic disorders in patients with ulcers of the extremities of traumatic origin, and the effectiveness of their treatment." Odessa, 1960. 14 pp; (Odessa State Medical Inst im N. I. Pirogov); 300 copies; price not given; (KL, 25-60, 140)

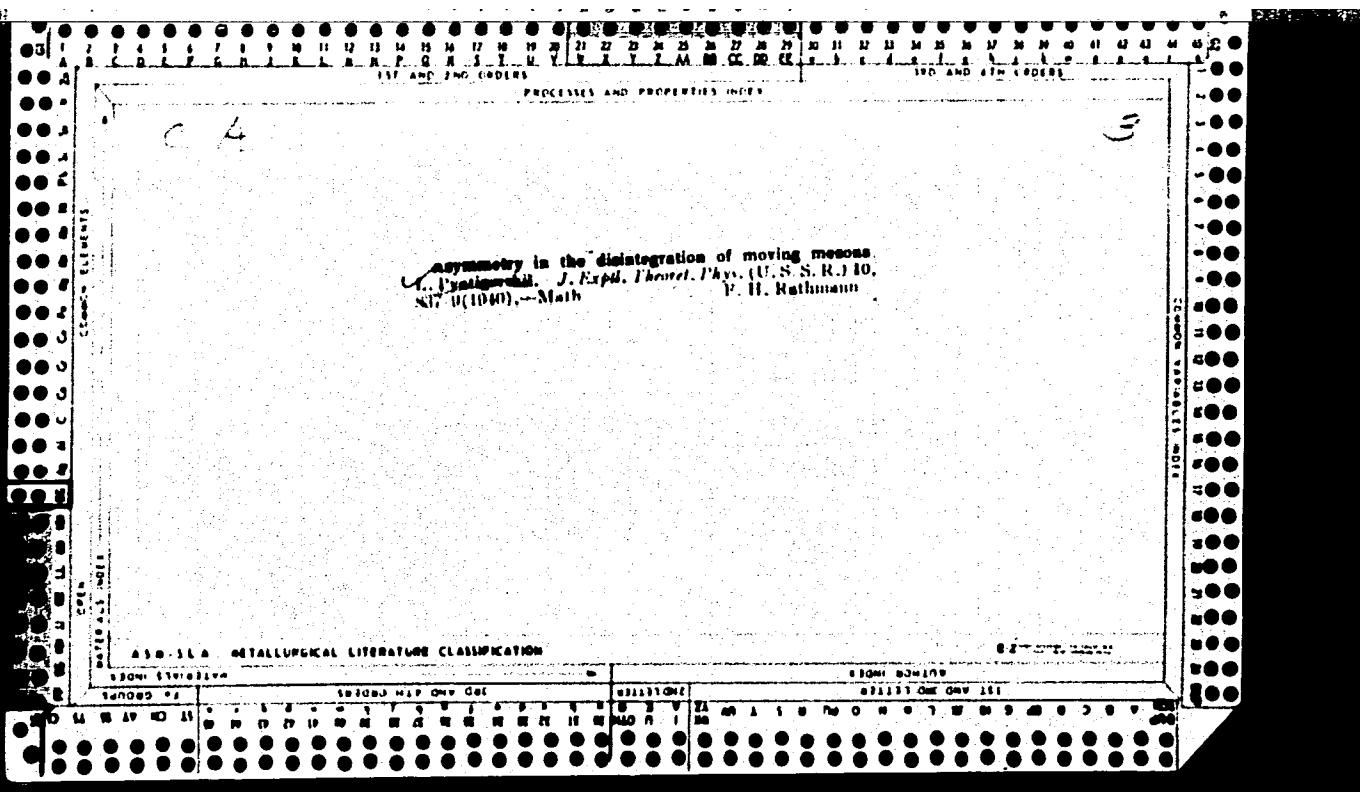
CHAYKOVSKIY, E.F.; PYATIGORSKIY, G.M.

Adsorption energy during ionization of atoms on a metal surface.
Dokl. AN SSSR 153 no.2:401-404 N '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov,
stsintil'yatsionnykh materialov i osobu chistykh khimicheskikh
veshchestv. Predstavлено akademikom P.A.Rebinderom.

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APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

PYATIGORSKIY, L. N.

"Theory of Plasma Waveguide," Trudy Fizicheskogo otd. fiz-mat. fak-ta
Kharkovsk. gos. un-ta. 4, pp 39-65, 1954

Propagation of electromagnetic axially symmetrical E₀-wave in a rectilinear cylindrical channel of radius a in infinite electron plasma is analyzed. Using Maxwell's equations the author proves that wave propagation with a phase velocity exceeding the speed of light is possible in such a channel. (RZhFiz, No 6, 1955)

Sum. No. 681, 7 Oct 55

PYATIGORSKIY, L. M.

PYATIGORSKIY, L. M.- "Interaction Between Charged Particles and Slow Electromagnetic Waves in Plasma Waveguides." Min of Higher Education Ukraine SSR, Khar'kov Order of Labor Red Banner State U imeni A. M. Gor'kiy, Kharkov, 1955 (Dissertations For the Degree of Candidate of Physicomathematical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

Category : USSR/Electronics - Gas Discharge and Gas-Discharge Instruments

H-7

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1708

Author : Pyatigorskiy, L.M.

Title : Electromagnetic Waves in Plasma in a Magnetic Field

Orig Pub : Uch. zap. Khar'kovsk. un-ta, 1955, 64- 23-30

Abstract : The properties of plasma located in a magnetic field are examined. The examination is based on the complete system of Maxwell's equations and on the equation of motion of the electron, without allowance for the random velocities. The solution of these equations yields an expression for the dielectric-constant tensor. An investigation of this tensor has shown that in the absence of a magnetic field the plasma behaves like an isotropic medium. The presence of a magnetic field makes the medium gyrotropic, and the degree of gyrotropy depends on the magnetic field and on the frequency of the field of the waves. The second part of the article reports an investigation of the behavior of electromagnetic waves propagating in the plasma (in particular, in plasma filling a cylindrical waveguide).

Card : 1/1

S/194/61/000/012/002/097
D209/D303

AUTHORS: Levin, M. M. and Pyatigorskiy, L. M.

TITLE: Applying a diode voltmeter for measurement of non-sinusoidal voltages

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12m 1961, 5, abstract 12A14 "Tr. In-tov Kom-ta standatov, mer i izmerit. proborov pri Sov. Min. SSSR", 1960, no. 48 (108) 116-123

TEXT: The connection between indicators of a diode voltmeter with an exponential characteristic in measuring sinusoidal and non-sinusoidal voltages for a general case with small distortions and for amplitude modulation is theoretically examined. Expressions for voltmeter errors in all these cases are obtained. An experimental check which was carried out, showed that the discrepancy between the calculated and experimental results does not exceed 5%. [Abstractor's note: Complete translation.]

Card 1/1

LEVIN, M.M.; PYATIGORSKIY, L.M.

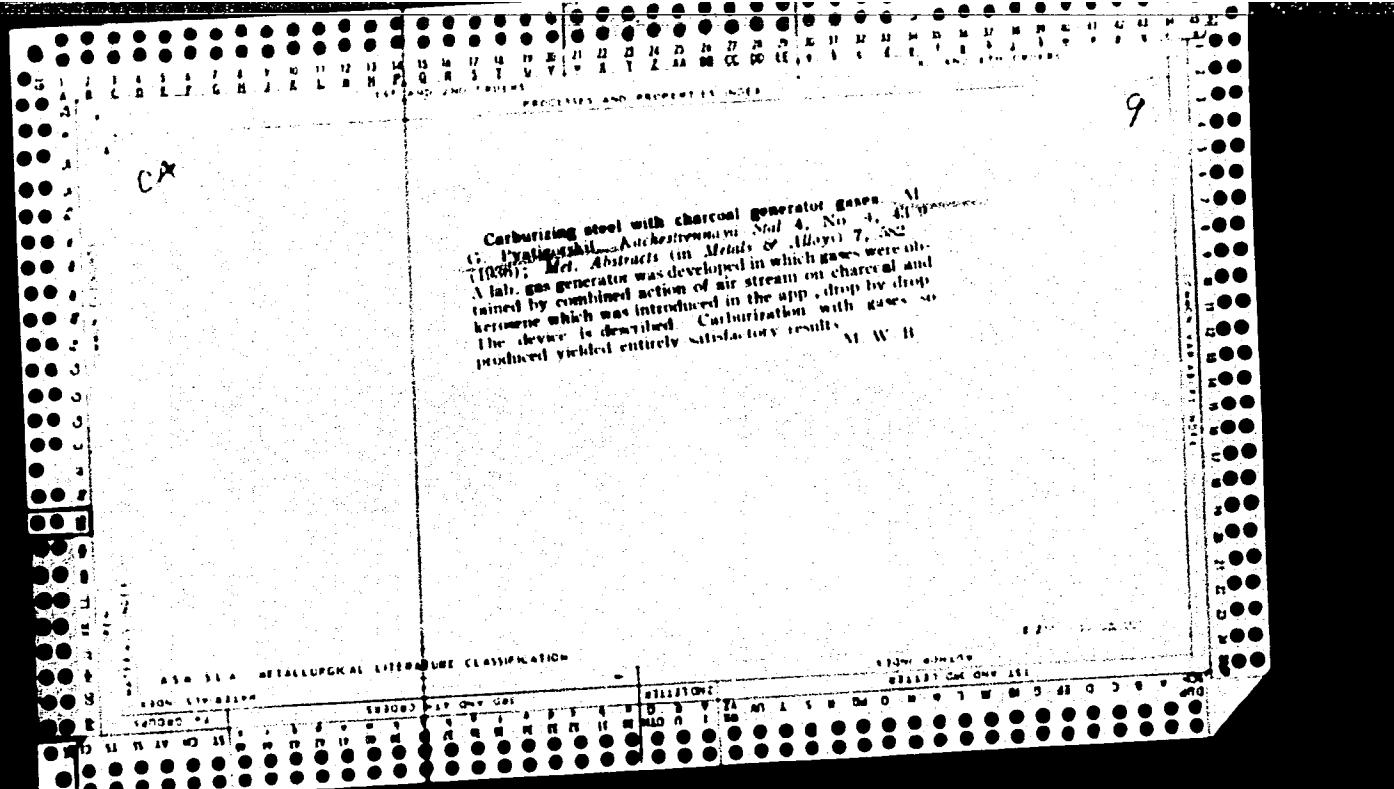
Use of a diode voltmeter for measuring nonzinusoidal voltages.
Trudy inst. Kom. stand., mer i izm. prib. no.48:116-123 '60.
(MIRA 14:6)

(Electron-tube voltmeter) (Electronic measurements)-

BRODSKIY, A.D.; KAN, V.L.; PYATIGORSKIY, L.M., nauchnyy red.;
KUZNETSOVA, M.I., red. izd-va; KASHIRIN, A.G., tekhn.
red.

[Brief manual on mathematical processing of measurement
results] Kratkiy spravochnik po matematicheskoi obrabotke
rezul'tatov izmerenii. Moskva, Gos. izd-vo standartov,
1960. 167 p. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metro-
logii im. D.I.Mendelejeva (for Brodskiy, Kan)
(Probabilities)



✓ 605. Determination of the carbon content of steel from the hardness of quenched samples. M. G. Pyatigorsk (Stalingrad Agric. Inst. and the "Red October" Works), *Zavod. Lab.*, 1956, 23 (7), 778-781.—The method enables the carbon content of carbon and alloy constructional steel during the time of the melt to be determined in 1.5 to 2 min. with an accuracy of the same order as that of the rapid combustion method. The sample of liquid steel is poured into a special mould which produces a rod of square section. The mould is so designed that when the rod is removed it has cooled to only $\approx 1100^{\circ}$. The sample is then plunged into ice and water ($+/- 5^{\circ}$) for 3 to 5 sec. Two opposite parallel surfaces are then cleaned with emery paper on a horizontal disc of 150 to 200 mm diameter revolving 700 to 1000 times a min. The surfaces are dipped in water and the Rockwell hardness is measured at four points along the length.

M. G. Pyatigorsk

"APPROVED FOR RELEASE: 06/15/2000

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0-4%, and is applicable up to 100%

G. S. Smith

GM

PYATI OMENIY, 1960

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Card 1/1

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

PYATIGORSKIY, M.G.

Determination of carbon content in steel based on the hardness of
quenched test pieces. Zav. lab. 22 no. 7:7/6-7/51 '56. (MLRA 9:12)
(Carbon--Analysis) (Steel--Analysis)

PYATIGORSKIY, N.G., docent, kand. tekhn. nauk; KONDRAT'YEV, Ye.I., inzh.

Effect of various methods of heat treatment on the plasticity of
Sv. 35G2S steel during drawing. Stal' 24, no. 9:848-850. S-16
(MIRA 17:10)

1. Volgogradskiy zavod proektov i sivennyy institut.

L 64380-65

(A)

ACCESSION NR: AP5021635

UR/0286/65/000/013/0119/0119

AUTHORS: Bauer, P. K.; Smirnov, Ye. M.; Bekishev, I. S.; Glukhov, B. A.; Pyatigorskiy, M. M.

TITLE: Working unit of a forced-action concrete mixer. Class 80, No. 172666

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 119

TOPIC TAGS: concrete, concrete mixer, mechanical motion instrument, construction machinery

ABSTRACT: This Author Certificate presents the working unit of a forced-action concrete mixer with an immobile container and a centrally located mixing mechanism (see Fig. 1 on the Enclosure). The mixer contains a guide bar

art. has: 1 figure.

ASSOCIATION: Novosibirskiy zavod stroitel'nykh mashin (Novosibirsk Construction Machinery Plant)

SUBMITTED: OIJul64

NO REF SOV: 000

Card 1/2

ENCL: 01

OTHER: 000

SUB CODE: IE

L 64380-65

ACCESSION NR: AP5021635

ENCLOSURE: 01

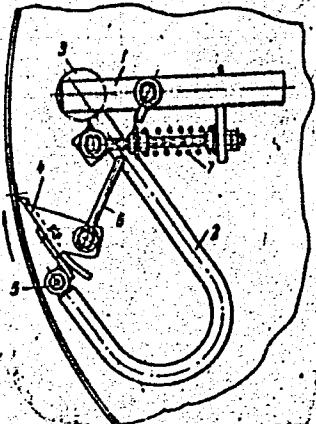


Fig. 1.

- 1- guide bar; 2- bracket; 3- bracket hinge; 4- scraper blade;
5- blade hinge; 6- rigid connecting rod; 7- returning spring

PYATIGORSKIY, Mikhail Vladimirovich; TRIPLETS, Fedor Nikiforovich;
TRIPLETS, Trofim Nikiforovich; DEMCHENKO, Mikhail Petrovich;
BELOGUB, L.M., otv.red.; PASHCHINSKAYA, G.E., red.; CHIRCHYSHEV, Ya.T., tekhn.red.

[Economic geography of the European peoples' democracies]
Ekonomicheskaja geografija evropeiskikh stran narodnoi demokratii.
Kharkov, Izd-vo Kharkovskogo gos.univ. im. A.M.Gor'kogo, 1958.
(MIRA 12:2)

370 p.

(Europe, Eastern--Economic conditions)

PYATIGORSKIY, V.Ya. [P'iatyhors'kyi, V.IA.]

Electron-tube millivoltmeter for biological and medical uses.
Fiziol. zhur. [Ukr.] 6 no. 5:691-693 S-0 '60. (MIRA 13:10)

1. Laboratoriya obshchey fiziologii Instituta fiziologii im. A.A.
Bogomol'tsa Akademii nauk USSR, Kiyev.
(MILLIVOLTMETER) (PHYSIOLOGICAL APPARATUS)

PYATIGORSKIY, B.Ya. [P"iatyhors'kyi, B.IA.]

Recording the action potentials of individual neurons on a magnetic carrier. Fiziol. zhur. [Ukr.] 8 no.1:129-131 Ja-F '61.

(MIRA 15:2)

1. Laboratoriya obshchey fiziologii Instituta fiziologii AN USSR,
Kiyev. (NERVES) (ELECTROPHYSIOLOGY)

PYATIGORSKII, Ya.

All-Union conference on forest-road construction workers.
Avt. dor. 28 no.1-30-31 Ja '65. (MIRA 18:3)

1. Glavnnyy spetsialist Gosudarstvennogo instituta po proyektirovaniyu
avtoremontnykh i avtotransportnykh predpriyatiy i scoruzheniy.

PYATKIN, A.M., kand. tekhn. nauk; POLYAKOV, P.I., inzh.; DUDNIK, T.M.,
dotsent, kand. tekhn. nauk; KHOKHLOV, N.P., inzh.; ASTAKHOV, A.S.

Readers' response to the article by A.S. Astakhov "Economic
efficiency of mining machinery"; "Ugol'", 1962, No.12.
(MIRA 17:5)
Ugol' 39 no.3:65-68 My'64.

POSPEROV, D.A.; PYATKIN, V.P.

Minimization of logic algebra functions using present-day
analog computers. Trudy MEI no.53:117-132 '64.
(MIRA 17:6)

PYATIKOP, A.I., dots., otv. red.; POTOTSKIY, I.I., prof., zam.
otv. red.; TSEKIDIS, G.S., st. nauchn. sotr., red.;
ZADOROZHNYY, B.A., dots., red.; KALANTAYEVSKAYA, K.A.,
prof., red.; YEVTSHENKO, G.I., dots., red.; BOGDANOVICH,
S.N., dots., red.

[Occupational diseases and skin collagenoses] Professional'-
nye zabolevaniia i kollagenozy kozhi. Kiev, Zdorov'ia,
(MIRA 18:7)
1965. 211 p.

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerolo-
gicheskiy institut. Problemnaya komissiya "Nauchnyye osnovy
dermato-venerologii". 2. Kafedra kozhnykh bolezney Kiyevskogo
meditsinskogo instituta (for Pototskiy). 3. Ukrainskiy
nauchno-issledovatel'skiy kozhno-venerologicheskiy institut
(for TSeraidis).

PYATIKOP, A.I., dotsent; BEZNOS, T.I., kand.med.nauk; LYUBETSKAYA, R.Ya.;
PARFILO, A.V.; YUKHNOVSKAYA, Ye.N.

Treatment of fungous skin diseases with griseofulvin. Vest. derm.
i ven. 38 no.4:47-50 Ap '64. (MIRA 18:4)

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerologicheskiy
institut (dir. - dotsent A.I.Pyatikop).

PYATIKOP, A.I., assistant

Results of treating a varicose syndrome by means of venous
obliteration. Vest.derm. i ven. 34 no.2:60-66 P '60.
(MIRA 13:12)

1. Iz kafedry koshnykh i venericheskikh bolezney (zav. - prof.
I.S.Popov) Khar'kovskogo meditsinskogo instituta (direktor -
dotsent I.F.Kononenko).
(VARICOSE VEINS ther.)

PYATIKOP, A. I., Cand Med Sci -- (diss) "Data for the pathogenesis of cutaneous complications of distended varicose veins of the lower extremities." Khar'kov, 1958. 15 pp
(Min of Health UkSSR. Khar'kov State Med Inst), 200 copies
(KL, 41-58, 122)

PYATIKOP, B.D.; MOLCHANOV, V.D.

What a modern metallographic microscope should be like. Zav.lab. 27
no.3:361 '61. (MIRA 14:3)

1. Ukrainskiy nauchno-issledovatel'skiy intitut ogneuporov (for
Pyatikop). 2. Irkutskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta khimicheskogo mashinostroyeniya (for Molchanova).
(Microscopes)

KARYAKIN, L.I.; PYATIKOP, P.D.

Formation of magnesian spinel from chromite during heating in a reducing medium. Min.sber.no.9:246-259 '55. (MIRA 9:9)

I.Khar'kov. Vsesoyuznyy nauchno-issledovatel'skiy institut egnuperev.
(Spinel group)

KARYAKIN, L.I.; PYATIKOP, P.D.

Thermal scouring. Zap.Vses.sin.eb-va 84 no.4:459-461 '55.
(MLRA 9:2)

1.Vseseyuznyy Nauchno-issledovatel'skiy institut egnuperev.
Khar'kov.
(Mineralogy)

PYATIKOP P.D.

USSR/ Minerals - Petrography

Card 1/1 Pub. 22 - 48/62

Authors : Karyakin, L. I., and Pyatikop, P. D.

Title : Changes in chromospinellides during heating

Periodical : Dok. AN SSSR 102/3, 601 - 603, May 21, 1955

Abstract : Experiments showed that the heating of chromospinellides with MgO or with magnesia silicates obtained from the same sources as the spinellides does not result in the formation of hematite dendrites in the chromospinellide grains. The excessive ferric oxide migrates into the periclase turning it into a reddish-brown color because of the formation in it of a solid magnisio ferrite solution; in some other instances the ferric oxide migrates into the magnesia silicates. The presence of easily oxidizable and mobile ferrous oxide and the nature of its distribution in chromospinellide grains were determined by the thermal pickling method. Nine references: 8 USSR and 1 German (1935-1953). Tables; illustration.

Institution : All-Union Sc. Res. Inst. of Refractories, Kharkov

Presented by: Academician N. V. Belov, January 12, 1955

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7

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APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

PYATIKOP, P.D.

Changes and reactions between chromium spinel and magnesioferrite during heating. L. I. Karyakin, P. D. Pyatikop, and B. Ya. Sukharevskii. *Doklady Akad. Nauk S.S.R.*, 109, 1009-11 (1960).—Cr spinel from the Syranovsk district shows during heating to 1200° a considerable reduction of the a_0 parameter (from about 8.270 Å. to 8.262 Å.); during further heating to 1700°, however, a_0 is increased to 8.277 Å. At the same time, above 1200° a new cryst. phase is observed, which is evidently Cr_2O_3 , with $d(234) = 1.201$ Å. at 1200°, and 1.235 Å. at 1500°. Above 1500° this d value remains const. Cr_2O_3 forms with Fe_3O_4 solid solns. which are observed as red anisotropic crystals. By reduction of Fe_3O_4 above 1300°, a mixed ferro-ferrichromite phase is formed. Synthetic mixts. of Cr spinel and $\text{Mg}_{0.5}\text{Fe}_{2.5}\text{O}_4$ were fired up to 1700°, and examd.

3

AUTHOR: Pyatikop, P. D.

307/20-120-3-43/67

TITLE: On the Isomorphism of $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ and $\text{CaO} \cdot \text{Cr}_2\text{O}_3$
(K izomorfizmu soyedineniy $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ i $\text{CaO} \cdot \text{Cr}_2\text{O}_3$)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp.592-594
(USSR)

ABSTRACT: Monocalcium ferrite as well as monocalciumchromite (as mentioned in the title) frequently occur in Siemens-Martin slags from steel smelting and in slags from the production of ferrochrome steels besides other minerals. These two compounds are interesting with respect to their interaction and to the possibility of forming solid solutions. As is known (Ref 1) compounds of such a type form a continuous series of solid solutions with each other, although the divergence in the values of the ionic radii of Al^{3+} ($0,57 \text{ \AA}$) and Cr^{3+} (65 \AA) is somewhat greater than in the case of Fe^{3+} ($0,67 \text{ \AA}$) and Cr^{3+} . The substances mentioned in the title were investigated in various proportions, produced from pure oxides. On the basis of the microscopical investigations of samples, which were burned, the authors found that

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Card 1, 3

SOV/20-120-3-43/67

On the Isomorphism of $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ and $\text{CaO} \cdot \text{Cr}_2\text{O}_3$

structure is homogeneous, fully crystalline and only one mineral phase exists. 2) The refraction indices of the forming mineral phase vary slowly, continuously and according to certain rules in samples with a different ratio between the two components (Fig 2). 3) The intensity of the double refraction remains relatively constant. 4) The color changes from brilliant red to dark green as the composition varies from pure $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ to pure $\text{CaO} \cdot \text{Cr}_2\text{O}_3$, a characteristic pleochroism appearing for the latter at a content exceeding 25 %. 5) The modification of the crystal form proceeds from an irregular one in pure $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ to a short-prismatic one in pure $\text{CaO} \cdot \text{Cr}_2\text{O}_3$. On the basis of these findings the author arrived at the conclusion, that a continuous series of solid solutions exists in the said system. They can be expressed according to the contained components by a general formula $\text{CaO} \cdot (\text{Fe}, \text{Cr})_2\text{O}_3$ = calcium ferritochromite or $\text{CaO} \cdot (\text{Cr}, \text{Fe})_2\text{O}_3$ = calciumchromitoferrite. The X-ray structural analyses of B. Ya. Sukharevskiy fully proved the existence of the mentioned series of solid solutions. There are 2 figures, 1 table, and 11 references, 10 of which are Soviet.

Card 2/3

SOV/20-120-3-43/67

On the Isomorphism of $\text{CaO} \cdot \text{Fe}_2\text{O}_3$ and $\text{CaO} \cdot \text{Cr}_2\text{O}_3$

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov
(All-Union Scientific Research Institute of Refractories)

PRESENTED: January 21, 1958, by N. V. Belov, Member, Academy of
Sciences, USSR

SUBMITTED: January 1, 1958

1. Calcium ferrites--Chemical reactions 2. Calcium chromites
--Chemical reactions

Card 3/3

TSIGLER, V.D.; PYATIKOP, P.D.

Mechanism of mass adhesion during hot gumiting of the basic
brickwork in open-hearth furnaces. Stal' 23 [i.e. 24] no.4:
313-315 Ap '64. (MIRA 17:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

PYATIKOP, P.D.

Study of the products of solid state reactions between
chromospinellide, forsterite, and calcium oxide with the
aid of a microscope. Zhur. prikl. khim. 37 no.2:262-
266 F '64.

(MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

152520

21h01
S/032/61/027/012/014/015
B104/B102

AUTHOR: Pyatikop, P. D.

TITLE: Device for microscopic examination of refractories with reflected light at temperatures up to 1100°C

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 12, 1961, 1545 - 1546

TEXT: The main parts of the device are an MBT (MVT) microscope with a long-focus objective and a tube furnace with platinum heater. Microscope and tube furnace are mounted on an optical bench in horizontal arrangement. The heater current is regulated by an autotransformer, and the temperature is measured with a Pt-PtRh thermocouple and a galvanometer. Oxidation and structural change of chromium ore are investigated on polished sections (3 - 3.5 mm thick disks whose diameter fits the furnace). A hole of 2 mm depth and 2 mm diameter holding the hot junction of the thermocouple, is arranged on the side of the section opposite to the polished surface. The polished section is placed in the furnace such that the optical axis of the microscope is at right angles to the polished surface. X

Card 1/2

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B104/B102

Device for microscopic examination ...

of the section. The latter is heated at a rate of $10^{\circ}\text{C}/\text{min}$. Structural changes are observed during the heat treatment. Above 700°C , the objective must be moved back in order to prevent overheating.
[Abstracter's note: Complete translation.] There is 1 figure.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov
(Ukrainian Scientific Research Institute of Refractories)

Card 2/2

PYATIKOP, P.D.

Investigation of chromite with a hot-stage microscope. Dokl.
AN SSSR 136 no. 3:675-677 Ja '61. (PLA 14:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
Predstavleno akademikom N.V. Belovym.
(Chromite)

PIROGOV, A.A.; LEVE, Ye.N.; PYATIKOP, P.D.

Changes in the structure of magnesia-concrete lining blocks of
blast furnaces. Ogneuproy 25 no.6:260-266 '60. (MIBA 13:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
(Blast furnaces)
(Concrete blocks)

15-1957-10-14100

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 116 (USSR)

AUTHORS: Karyakin, L. I., Pyatikop, P. D.

TITLE: The Formation of Magnesian Spinel From Chromite When
Heated in a Reducing Environment (Obrazovaniye magne-
zial'noy shpineli iz khromita pri nagrevaniil v vossta-
novitel'noy srede)

PERIODICAL: Mineralog. sb. L'vovsk. geol. o-va pri un-te, 1955,
Nr 9, pp 246-259

ABSTRACT: Cylinders of chrome spinel from the chromite ores of the
Saranovskoye and Kempirsayskoye deposits, formed under
pressures of 1000 kg/cm², were heated in a coking-gas
atmosphere at a temperature of 1400 to 1700°; the tem-
perature was raised at the rate of 250°/hour. As a re-
sult, the oxides of chromium and iron were reduced to
metals. In this process the chrome spinel was enriched
in MgO and Al₂O₃ and there occurred a transition from
the colorless or slightly tinted Fe₂O₃ and Cr₂O₃ to the

Card 1/2

15-1957-10-14100

The Formation of Magnesian Spinel From Chromite When Heated in a Reducing Environment

reddish-orange spinel. The mineral acquired a somewhat higher index of refraction and an increase in the dimensions of the lattice parameters. When the furnace was heated to higher temperatures, the quantity of magnesian spinel and the smelting of metals increased, accompanied by a decrease in the index of refraction till it approached normal. Microscopic studies have shown that the nature of the changes in chrome spinel in an ore mass is the same as it is when the mineral is heated without the enclosing rock. The number of silicates decreases at high temperatures and many go over to a glassy state. Part of the magnesia and silica of the silicates is reduced to metal. On cooling in a non-reducing environment Mg and Si are oxidized to MgO and SiO_2 and a white incrustation is formed on the specimens and on the walls of the furnace, consisting of periclase, forsterite and, less commonly, clinoenstatite. These minerals are formed by the interaction of MgO and SiO_2 .

N. N. Kurtseva

Card 2/2

Pyatikrestovskaya, K. B.

110

✓Synthesis of β -alkyl fructosides by plant tissues. A. I. Oparin, M. S. Bardinskaya, and K. B. Pyatikrestovskaya. *Doklady Akad. Nauk S.S.R.* 104, 886-9 (1956). Suspensions of the matter of leaf buds of various trees and bushes, collected in the spring, show the presence of very active invertase in aq. soln.; in aq. EtOH the systems showed active synthesis of β -methyl fructoside, most intensively shown by opening buds. Yeast invertase acting on sucrose at pH 4.7 gave some synthesis of methyl fructoside if the system contained MeOH, EtOH, PrOH, BuOH, or Ph-CH₂OH; with AmOH the reaction was very weak, while with C₆H₅OH it was absent. G. M. Kogolani

(2)

PYATIKRESTOVSKAYA, K.B.

16455. Aromatic precursors of lignin in plants. M. S. Bardina and K. B. Pyatikrestovskaya *Izv. Akad. Nauk, S.S.R. Biol.*, 1956, No. 1, 100-115; *Ref. Zh. Biol.*, 1956, Abstr. No. 80345.— Assuming that aromatic compounds of the type of coniferyl aldehyde or alcohol may take part in lignification of cell walls, the biosynthesis of these substances was elucidated. The ether extract of leaf buds of black current, birch, mountain ash, etc., collected from March—May 1954, contains substances giving a coloration with phloroglucin and HCl and a similar R_f to the oxidation products of coniferyl alcohol. Invertase and glucosidase may play a part in wood formation by liberating fructofuranose, which then undergoes further transformations. (Russian) T. R. PARSONS

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7

PYATIKRESTOVSKAYA, K.B.

Stand for applying solutions to chromatographic paper. Zav.lab.
22 no.6:749 '56.. (MLRA 9:8)
(Chromatographic analysis)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7"

PYATKIN, A.M., kand.tekhn.nauk

Efficient shaft diameters for rode-type timber. Shakh. stroi. 4 no.4:
15-16 Ap '60.. (MIRA 13:11)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Mine timbering)

PYATKOVSKIY, G., inzh.-informator; IVANCHUK, V.; KZHAKHOV, V.;
SIMONOV, M.; KHROMOV, K., zhurnalist (Baku); DUDETSKIY, E.;
TRAVNIKOV, N.

We are living this way. Izobr. i rats. no.12:8-9 '63.
(MIRA 17:2)

1. Trest "Kommunarskugol", Luganskaya obl. (for Pyatkovskiy).
2. Sotrudnik oblastnoy gazety "Krasnyy Sever", Vologda (for Ivanchuk).
3. Starshiy inzh. Kazakhskogo respublikanskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Kzhakhov).
4. Sekretar' Udmurtskogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, Izhevsk (for Simonov).
5. Nachal'nik otdela tekhniki bezopasnosti Lyuberetskogo zavoda imeni Ukhtomskogo (for Dudetskiy).
6. Korrespondent zhurnala "Izobretatel' i ratsionalizator" (for Travnikov).

L 4906-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP5026305

UR/0144/65/000/008/0905/0906
681.142.6.44

AUTHOR: Kamen', L.I. (Engineer); Timoshuk, K. P. (Engineer); Pyatiletova, G. P. (Engineer)
TITLE: The improvements in the floating decimal point interpretation system used in the "Minsk-1" computer

SOURCE: IVUZ. Elektromekhanika, no. 8, 1965, 905-906

TOPIC TAGS: computer program, computer programming, computer coding, coding

ABSTRACT: The producer of the "Minsk-1" type machines (Minsk-11, 12, 14) developed a floating decimal point interpretation system which allows the original computer, designed to operate under fixed decimal point conditions, to solve problems with floating point. However, the use of such interpreters in the case of programs containing numerous sub-programs with large pseudocodeless portions considerably slows down the solution of the problems. To shorten the machine time without complicating the task of the interpretation system, the present authors investigated approaches for 1) the bypassing of and return to the interpreter; and 2) for the continuous use of floating decimal point standard subprograms (unaltered, or with a minimum amount of alterations). This was achieved with the introduction of the "64 k 0000" pseudocode and minor alterations in the interpreter and standard subprograms, which are described in the present note. Orig. art. has: 2 tables.

Card 1/2

L 4906-66

ACC NR: AP5026305

ASSOCIATION: Novo-Kramatorskiy mashinostroitel'nyy zavod (Novo-Kramatorsk Machine-Building Factory) 2

SUBMITTED: 25Aug64

ENCL: 00

SUB CODE: DP

NO REF SOV: 002

OTHER: 000

PC

Card 2/2

BADYSHTOVA, K.M.; CHESNOKOV, A.A.; IVANKINA, E.B.; ZHADANOVSKIY, N.B.;
KONYUKHOVA, M.V. Prinimali uchastiye: KONOVALOV, B.S., inzh.;
NAUMOVA, A.P., inzh.; PYATILETOVA, N.I., inzh.; SMIROVA, S.M.,
inzh.; CHIBRIKOVA, L.I., laborant; BUGROVSKAYA M.S., laborant.

Effect of the nature of raw stock on the stability of transformer
oil. Nefteper. i neftekhim. no.11:15-17 '64 (MIRA 18:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut neftyanoy
promyshlennosti , Kuybyshev i Novokuybyshevskiy zavod.

CHESNOKOV, A.A.; ZHERDEVA, L.G.; Prinimali uchastiye: KOZHEVNIKOV, S.A.;
PYATILETOVA, N.I.; POPOVA, L.D.; LEVINA, L.P.

Effect of resins on the process of dewaxing of residual
raffinates. Khim. i tekhn. topl. i masel 8 no.7:23-30 Jl '63.
(MIRA 16:7)

1. KNII NP i Vsesoyuznyy nauchno-issledovatel'skiy institut
po pererabotke nefti i gazov i polucheniyu iskusstvennogo
zhidkogo topliva.
(Petroleum—Refining) (Paraffin wax)

L 42173-66 EWT(m)/T DJ

(A)

SOURCE CODE: UR/0081/65/000/019/P018/P018

ACC NR: AR6014532

AUTHORS: Badyshkova, K. M.; Vipper, A. B.; Vorozhikhina, V. I.; Denisenko, K. K.; Kreyn, S. E.; Pyatiletova, N. I.; Ryazanov, L. S.; Yastrebov, G. I.TITLE: Effect of the extent of refining¹¹ of the distillate and residual components ^B
of DS-14 oil from sulfurous petroleum upon their operational properties ³¹
¹¹

SOURCE: Ref. zh. Khimiya, Abs. 19P129

REF SOURCE: Tr. Kuybyshevsk. n.-i. in-t neft. prom-sti, vyp. 25, 1964, 85-95

TOPIC TAGS: lubricating oil, petroleum refining, phenol / DS-14 lubricating oil,
MS-20 lubricating oil, DS-11 lubricating oilABSTRACT: Laboratory study and testing on the engine YaAZ-204 of five samples of
DS-14 oil of Novokuybyshev NP2¹¹ (differing by the technology of their processing) have
been performed. The study shows that the changes in the extent of phenolic refining
of distillate and residual components (within the limits of 160-180 and 250-320%
of phenol, respectively) have no effect on the detergency, antioxidative, and anti-
wear properties¹¹ of DS-14 oil containing effective additives. Economically, the most
convenient method for producing DS-14 oil is to mix the residual and distillate com-
ponents of Diesel oil, 60 and 40%, respectively, (i.e., components treated to a less
extensive phenolic refining). This leads to lowering the price of DS-14 oil by 15%
and to increasing its yield by 4%, as compared with the production of DS-14 oil by
mixing oils MS-20 and DS-11.¹¹ A. N. [Translation of abstract]

SYB CODE: 11/

Card 1/1

L 13696-66 EPA/EWT(1)/EWP(f)/T-2 WW

ACC NR: AP6002538

SOURCE CODE: UR/0286/65/000/023/0039/0040

INVENTOR: Moskalev, Yu. V.; Dubrovskiy, D. M.; Fyatilyshnev, V. S.; Yefremov, N. D.
Mel'nikov, I. G.

53B

ORG: none

TITLE: Method of manufacturing mixed-flow compressor rotors. Class 27, No. 176657

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 39-40

TOPIC TAGS: compressor rotor, compressor blade, gas turbine

ABSTRACT: An Author Certificate has been issued for a method of making compressor rotors for low-power gas turbine units by casting. In this process the metal is poured into a special mold with pre-positioned press-forged blades. The mold is a metal shell with openings for fitting the blades and it becomes a part of the rotor. To improve the aerodynamic characteristics of the blade passages, the blade roots are

Card 1/2

UDC: 621.515-226.2.002.2

L 13696-66

ACC NR: AP6002538

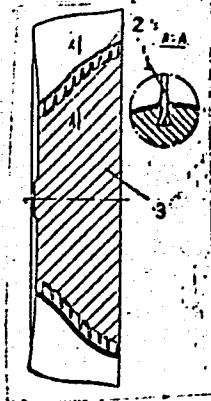


Fig. 1. Compressor rotor

1 - Blade; 2 - mold; 3 - rotor.

split and bent outward (see Fig.), and the corners between the blade and the mold shell are rounded off by welding. Orig. art. has: 1 figure. [TN]

SUB CODE: 21/ SUBM DATE: 11Sep63/ ATD PRESS: 4185

Card 2/2 PL

FYATIN, M. V.

Excavation

More efficient excavation operations in draining marshes, Les. khoz. 6, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

ANTSUTA, Ye.B., arkhit.; KIRILLOV, N.P., arkhit.; KUZNETSOV, V.V., arkhit.;
SLOTINTSEVA, M.N., arkhit.; PIATIN, S.G., inzh. Prinimali uchastiye:
CHUYENKO, R.G., arkhit.; MOSEVICH, Ya.Ya., arkhit.; GLAZKOV, F.I.,
st. tekhnik; GOLUKHOV, G.I., inzh.; SAMSONOVA, T.T., inzh.; KOLESOVA,
Ye.Ye., st. tekhnik; MAKAROVA, T.N., tekhnik; SHAMBAT, M.S., inzh.;
SEMENOVA, G.V., inzh.; PLATUNIN, Yu.S., gr. inzh.; VOL'NOVA, T.F.,
tekhnik; SOLOV'YEV, M.I., inzh.; MOREV, I.A., tekhnik.

[Two-apartment house with two-room apartments; standard plan 1-102-5]
Dvukhkvartirnyi zhiloi dom, kvartiry v dve komnaty; tipovoi proekt
1-102-5. Moskva, Al'bom 1. 1960. 27 p. (MIRA 14:10)

1. Moscow. TSentral'nyy institut tipovykh proyektorov.
(Apartment houses--Designs and plans)

1. FILIPPOV, N. N.; PYATIN, S. G., Engs.
2. USSR (600)
4. Roofs
7. Large roof panels for general use made from light concrete with Kashira slag.
Biul. stroi. tekhn. 10, No. 9, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

FYATIN, Yu.M., doktor tekhn. nauk, prof.; KAVALEROV, G.I., kand.
tekhn. nauk, retsenzent; KHUKHLIN, M.S., inzh., red.

[Design of the electrical components of measuring instruments] Raschet elektricheskikh elementov izmeritel'nykh pri-
borov; spravochnoe posobie. Moskva, Mashinostroenie, 1965.
198 p. (MIRA 18:6)

SOV/119-58-11-8/15

9(6)

AUTHOR:

Pyatin, Yu. M., Candidate of Technical Sciences

TITLE:

On the Problem Concerning the Selection of Optimum Conditions
for the Parameters of a Measuring Device (K voprosu o vybere
nailuchshego sootnosheniya parametrov izmeritel'nogo pribora)

PERIODICAL:

Priborostroyeniye, 1958, Nr 11, pp 24-25 (USSR)

ABSTRACT:

Evaluation of the quality of a measuring device according to
its theoretically calculated quality coefficient A_m with
the relation

$$A_m = \frac{M_{yy} \alpha_m}{M_{mp}}$$

 $(M_{yy}$ = specific adjustable moment) α_m = aperture angle of the scale, M_{mp} = moment of friction in the bearings)does not agree with the generally valid evaluation of the
measuring quality of a device. It is better to introduce a
new criterion, viz. that of "electromechanical quality"

Card 1/2

SOV/119-58-11-8/15

On the Problem Concerning the Selection of Optimum Conditions for the Parameters of a Measuring Device

(ν_{EM}), which is inversely proportional to the reduced error of indication Δx_{np} , caused by the perturbing moment. In this case, therefore, the relation

$$\nu_{EM} = \frac{1}{\Delta x_{np}}$$

holds good.

When calculating electrical and mechanical single components it is necessary to endeavor to find the best "quality" for each individual component, in which case each quality factor should depend solely on the parameters of the individual components concerned. The quality factors for a support, a mobile system, and for an electric circuit of a measuring device are given.

Card 2/2

Библиография. — Труды кафедры математики. — Краснодар: Академия гуманитарных наук ЮФО, 1991. — 250 с.

Mr. V.L. Elter, Candidate of Technical Sciences; Tech. Ed.: Z.I. Chernov;
Branch M. for Literature on Machine Building and Instrument-making (mechatronics);
Un. 971, 7,000 copies planned.

PURPOSE: The book is intended for teachers in schools of higher education, and
for those who are interested in problems of education.

CONTENTS: This collection contains articles on the theory and technique of automatic regulation and control. The problems discussed concern the calculation of optimum parameters of low-power servomechanisms, correction of the system of automatic regulation with a delay unit, and the construction of optimum servomechanisms. Several methods of improving the dynamic properties of servomechanisms and methods of opportunity for realization of pulse servo-mechanisms are also explained. Some considerations regarding possibility of using servomechanisms, but yielding in a random direction are presented. The authors of the collection are all well-known Soviet scientists. The articles are based on scientific research work conducted by the department during the last five years. Some generalities are mentioned in each article. References are given after each article.

Received the use of a two-channel control system for time control and excitation standards.

2
In certain transistors the collector-emitter junction is reverse-biased so as to provide an alternative current path through the collector. This alternative path is controlled by the base current. The collector current is then given by the equation
$$I_C = I_S (e^{V_{BE}/V_T} - e^{V_{CE}/V_T})$$

Digitized by srujanika@gmail.com

Eugen, Ya. B., Candidate of Technical Sciences. *Design and Construction of Chemical Correcting Device*. The author outlines a sequence of calculations, discusses the elements of the correcting device and

Designing Single-cycle
85

RESONANT POWER AMPLIFIERS.—A further development of the methods of calculating parameters of magnetic amplifiers containing an external feedback and a bias circuit which were suggested in the two articles given as references, the author presents a practical method of designing a single-cycle magnetic amplifier with a bias and an external feedback assembled from three-rod and ferrite cores.

BIBLIOGRAPHY
COLLEGE OF MECHANICAL SCIENCES
Editorial Selection of

97
The author wishes to thank Mr. C. J. Clegg, of the Ministry of Transport, for permission to publish this article. The author also wishes to thank Mr. G. W. H. Williams, of the Ministry of Transport, for permission to publish this article.

107
Contact Devices of
the **Technical Sciences**.
In any electric circuit.

According to the author, the object of this article is to present all information essential for correct selection of the subject system, with consideration for its operational conditions. According to the author of this collection, this particular article may be used by students of schools of higher education. There may also be some applications.

卷之三

Fig. 1. H. B. Shadman. Automation of Bass Weaving. A discussion based on recent developments in the automation of wall-to-wall carpeting which attempt to increase the productivity and economy of the production process, with simultaneous improvement of the quality of the product. The paper reviews existing methods of controlling the weaving process, the problems of the wefted surface and basic considerations on the development of automatic weaving machines are presented. Some alternative methods of automatic weaving machines based on the use of microprocessors are also discussed.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343720013-7

PYATIN, Yu.M., kand.tekhn.nauk

Contact systems of automatic control. [Trudy] MVTU no.97:105-149
'59. (MIEA 13:5)

(Electric contactors)
(Automatic control)

PYATIN, Yu.M.

Selecting the most favorable correlation of parameters for
measuring instruments. Priborostroenie no.11:24-25 N '58.
(MIRA 11:12)

(Measuring instruments)

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PYATIN, Yu.M., kand.tekhn.nauk

Rational selection of parameters for Wheatstone bridge networks.
[Trudy] MVTU no.97:97-104 '59. (MIRA 13:5)
(Wheatstone Bridge)

AUTHOR:

Pyatin, Yu.M.

SOV/ 119-58-7-7/10

TITLE:

On the Methods of Calculating Electric Apparatus Chains of the Type of an Anisotropic Bridge (O metodakh rascheta pribornykh elektricheskikh tselye tipa neravnovesnykh mostov)

PERIODICAL:

Priborostroyeniye, 1958, Nr 7, pp. 24-26 (USSR)

ABSTRACT:

In the course of the setting up of criteria for the quality of electric apparatus and devices it was found when dealing with two concrete examples of calculation that the quantities M_{yy} and S hitherto used cannot be accepted as being sufficiently precise. The two aforementioned cases were 1. the calculation of a logometrical device with mobile magnet, and 2. an anisotropic bridge. (M_{yy} = the specific balancing moment of the indicator of the device, S = sensitivity of the circle). It is recommended to use the quantity Q = coefficient of the stability of the recording apparatus for the purpose of selecting the best parameters of a circle for an electrical apparatus. When comparing several recommendations made for similar apparatus it is advisable to take account of the maximum permissible load.

Card 1/2

On the Methods of Calculating Electric Apparatus
Chains of the Type of an Anisotropic Bridge

SOV/119-58-7-7/10

both for individual circles and for the whole apparatus. A recommendation made without taking the total load into consideration may be dangerous.
Selection of the ratio of the most favorable parameters must be made for such a state of a circle as corresponds to the most sensitive point on the indicator-scale of the apparatus. There are 2 figures and 4 Soviet references.

1. Electrical equipment--Design
2. Mathematics--Application
3. Electric bridges--Design

Card 2/2

PYATIN, Yu.M.

PYATIN, Yu.M., kandidat tekhnicheskikh nauk.

New criterion for selecting the best parameter correlation for
electromechanical instruments. Priborostroenie no.7:17-19 Jl '57.
(Electric instruments) (MIRA 10:9)

PYATIN, Yu.M., detsent (Moskva)

Calculation of currents in linear circuits. Elektricheskiye no.4:
67-69 Ap '56. (Electric circuits) (MLRA 9:7)

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CIA-RDP86-00513R001343720013-7

PYATINA, T.I.

Paddle mixers. Standartizatsiia 25 no.1852-53 Ja '61. (MIRA 14:3)
(Mixing machinery--Standards)

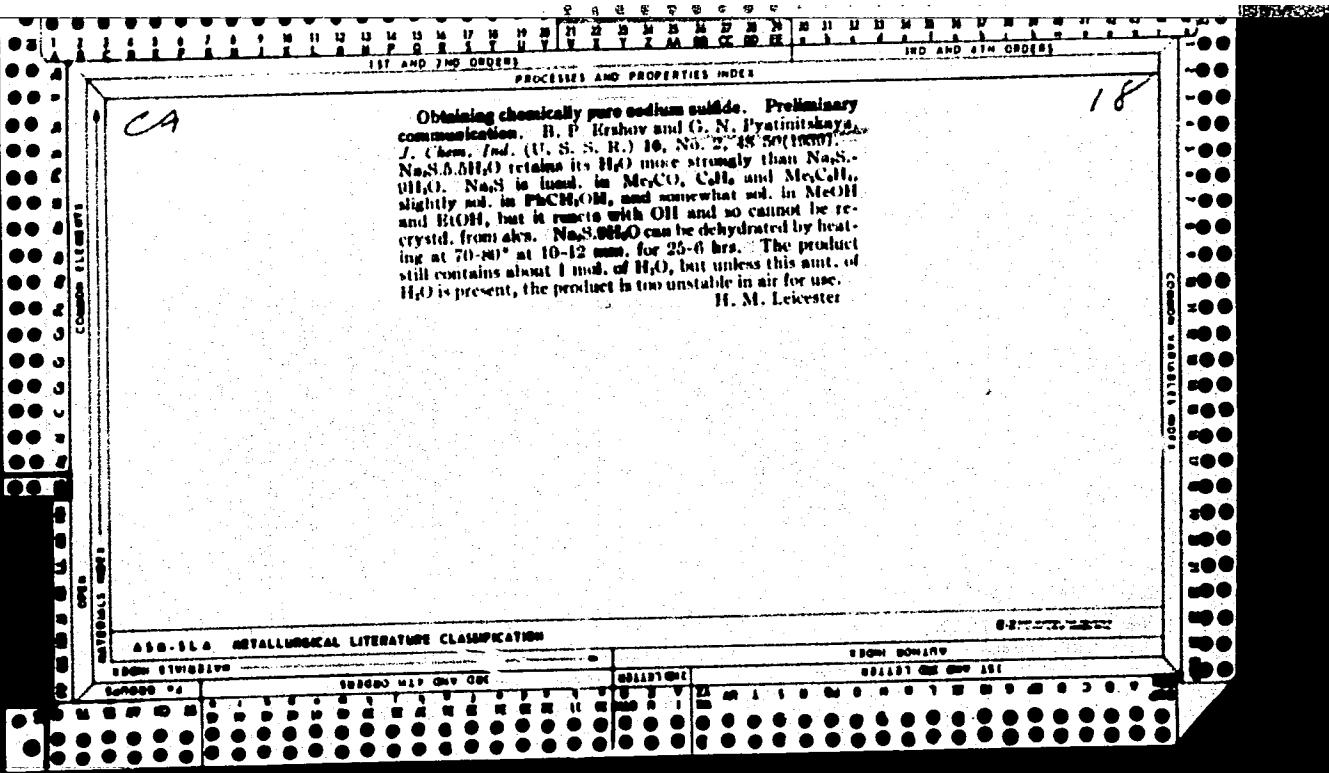
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CIA-RDP86-00513R001343720013-7"

PYATININ, F.; IGNATOVA, V., starshiy master.

Construction projects of Magnitogorsk. Prof. -tekhn.oibr. 11 no.2:19-21 '54.
(MLRA 7:6)

1. Direktor shkoly PZO No.4 stroiteley (Magnitogorsk) (for Pyatinin).
(Magnitogorsk--Technical education) (Technical education--Magnito-
gorск)



PYATISHKIN, M.M.

Using lignite and peat briquets and peat in rural stoves. Visnyk
AN URSR 27 no.6:46-47 Je '56. (MIRA 9:9)
(Briquets (Fuel))

PYATISOTNIKOV, Aleksandr Ivanovich; ZHURAVLEV, Arkadiy Vasil'yevich;
VEROMAN, V.Yu., red.

[Electric machining of intricately shaped parts made of heat-resistant alloys] Obrabotka detalei slozhnogo profilia iz zharoprochnykh splavov elektricheskimi sposobami. Leningrad, 1963. 21 p. (Leningradskii dom nauchno-tehnicheskoi propagandy. Obmen peredovym optyom. Seriia: Elektricheskie metody obrabotki materialov, no.7) (MIRA 17:4)

PYATKIN, A.M., inzh.

Advisability of slab entry mining in flat Donets Basin seams.
Izv.vys.ucheb.zav.; gor.zhur. no.4:10-16 '58. (MIRA 11:11)

1. Leningradskiy gornyy institut.
(Donets Basin—Mining engineering)